

**Amendment of the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently amended) A murine monoclonal antibody or immunologically reactive fragment thereof which recognizes and binds to a protein complex comprising a two-chain form of matriptase, wherein said antibody is selected from the group consisting of ~~M32, M69, and M19~~ M69 and M123.

16. (Previously presented) An isolated antibody or immunologically reactive fragment thereof which selectively binds with greater affinity to a two-chain (active) form of matriptase of a human than to a single-chain (zymogen) form of matriptase of said human.

17. (Canceled)

18. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein the antibody is a monoclonal antibody.

19. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 15, wherein the immunologically reactive fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')<sub>2</sub>.

20-33. (Canceled)

34. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein the immunologically reactive fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')<sub>2</sub>.

35. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein said single-chain form of matriptase comprises a polypeptide encoded by the nucleotide sequence of SEQ ID NO: 4, and the two-chain form of matriptase is produced by cleavage of said single-chain form of matriptase.

U.S. Patent Application No. 09/936,333  
Attorney Ref. No.: 082137-0280655

36. (Currently amended) The antibody or immunologically reactive fragment thereof of claim 16, which binds to the two-chain (active) form of a matriptase protein that is present in a complex comprising ~~a Kunitz-type serine protease inhibitor~~ Hepatocyte growth factor activator inhibitor-1 (HAI-1) or a fragment thereof.